



# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: IECEx IMQ 15.0009X Issue No: 0 Certificate history:  
Issue No. 0 (2016-01-29)

Status: **Current** Page 1 of 3

Date of Issue: **2016-01-29**

Applicant: **CORTEM S.p.A.**  
Via Aquileia, 10 – 34070 Villesse (GO)  
**Italy**

Electrical Apparatus: **Polyamide cable glands for circular and flat cables serie: UN . . X . 4 - . ; UN . . X . 4 - . DC; UN . . X . 7 . ; UN . . X E 7 - . F (axb); UN . . X . 7 . (DS); UN . . X . 7 M . ; UN . . X . 7 M . (DS); Polyamide plugs serie: PLG . . X E 4 - . ; PLG . . X E 7 - . ; PT .**

Optional accessory:

Type of Protection: **Ex e; Ex tb**

Marking: Ex e IIC Gb  
Ex tb IIIC Db IP66/68

Approved for issue on behalf of the IECEx  
Certification Body:

Mr. Mauro CASARI

Position:

IMQ ExCB Manager

Signature:  
(for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.
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Certificate issued by:

**Istituto Italiano del Marchio di Qualità S.p.A**  
Via Quintiliano 43  
20138 Milano,  
Italy





# IECEX Certificate of Conformity

Certificate No: IECEx IMQ 15.0009X Issue No: 0  
Date of Issue: 2016-01-29 Page 2 of 3  
Manufacturer: **CORTEM S.p.A.**  
Via Aquileia, 10 – 34070 Villesse (GO)  
**Italy**

Additional Manufacturing  
location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

## STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

**IEC 60079-0 : 2011** Explosive atmospheres - Part 0: General requirements  
Edition:6.0  
**IEC 60079-31 : 2013** Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"  
Edition:2  
**IEC 60079-7 : 2006-07** Explosive atmospheres - Part 7: Equipment protection by increased safety "e"  
Edition:4

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

## TEST & ASSESSMENT REPORTS:

*A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in*

Test Report:

[IT/IMQ/ExTR15.0011/00](#)

Quality Assessment Report:

[IT/CES/QAR06.0002/09](#)



# IECEx Certificate of Conformity

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## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The polyamide cable glands series UN . . X . 4 - . ; UN . . X . 4 - . DC; UN . . X . 7 . ; UN . . X . 7 . (DS); UN . . X . 7 M . ; UN . . X . 7 M . (DS) are used to introduce permanently circular cables into enclosure.

The polyamide cable glands series UN . . X E 7 - . F (axb) are used to introduce permanently non-circular (flat) cables into enclosure.

Plugs series PLG . . X E 4 - . and PLG . . X E 7 - . are used to close unused cable entry of an enclosure.

Cable glands and plugs are suitable for electrical equipment either with type of protection Ex-e or type of protection Ex-t. Cable glands should be also used for intrinsically safe circuits Ex-i.

Cable glands UN . . X . 7 M . and UN . . X . 7 M . (DS) are provided with a reinforced metal insert in the cap.

Cable glands UN . . X . 7 . (DS) and UN . . X . 7 M . (DS) are provided with single (S1) or double (S1+S2) sealing rings.

Cable glands UN . . X . 4 - . DC are provided with double rings and internal crowns.

Cable glands UN . . X . 4 - . ; UN . . X . 7 . and UN . . X . 7 M . are provided with single (S1) sealing rings only.

Cable glands series UN . . X E 7 - . F (axb) are provided with sealing ring specific for non-circular (flat cables), sealing ring hole dimensions are specified in brackets.

Cable glands UN . . X . 4 - . ; UN . . X . 4 - . DC; UN . . X . 7 . ; UN . . X . 7 . (DS); UN . . X . 7 M . ; UN . . X . 7 M . (DS) can be supplied with tap, polyamide made, as accessory (PT.), suitable to guarantee IP degree when installed according to manufacturer's instructions.

Additionally, dust plugs are used for Ex polyamide cable glands to protect the glands from dust during the shipment. It is taken out during installation.

Details on sealing rings material, flat washer (placed between the body and the cover of enclosures) materials and limitations are listed in Annex.

### CONDITIONS OF CERTIFICATION: YES as shown below:

- The cable glands are only suitable for fixed installations. Cables shall be effectively clamped to prevent pulling or twisting.
- The cable glands/plugs and the relevant cables, shall be used where a protection against risk of mechanical damage is provided, when they are suitable for low mechanical risk (4J) only.
- The cable gland installation shall be done according to safety manufacturer instructions to maintain degree of protection.
- For gas installations (only for cable glands with M50/PG42/PF 1 1/2"/NPT 1 1/2" threads and following) and dust installations:  
Warning. Potential electrostatic charging hazard - See instructions. Clean only with antistatic clothes.
- When cable glands are installed with polyamide insert PT., mechanical risk have to be taken into account, depending on cable gland and insert tap. When insert tap is removed in order to install the proper cable, the integrity of sealing rings have to be checked, in order to guarantee the correct tightness. If necessary, sealing rings have to be replaced with new ones (original spare parts only).
- Cable glands for non circular cables shall be fitted with proper cables, suitable for sealing ring, according to manufacturer's instruction.

### Annex:

[IECEx IMQ 15.0009X issue No. 0 Annex.pdf](#)

**Annex to:** IECEx IMQ 15.0009X issue No. 0  
**Applicant:** CORTEM S.p.A.  
**Apparatus:** UN . . X . 4 - . ; UN . . X . 4 - . DC; UN . . . X . 7 . ; UN . . X E 7 - . F (axb); UN . . . X . 7 . (DS); UN . . . X . 7 M . ; UN . . . X . 7 M . (DS); PLG . . X E 4 - . ; PLG . . . X E 7 - . ; PT .



## General description

The polyamide cable glands series UN . . X . 4 - . ; UN . . X . 4 - . DC; UN . . . X . 7 . ; UN . . . X . 7 . (DS); UN . . . X . 7 M . ; UN . . . X . 7 M . (DS) are used to introduce permanently circular cables into enclosure.

The polyamide cable glands series UN . . X E 7 - . F (axb) are used to introduce permanently non-circular (flat) cables into enclosure.

Plugs series PLG . . X E 4 - . and PLG . . . X E 7 - . are used to close unused cable entry of an enclosure.

Cable glands and plugs are suitable for electrical equipment either with type of protection Ex-e or type of protection Ex-t.

Cable glands should be also used for intrinsically safe circuits Ex-i.

Cable glands UN . . . X . 7 M . and UN . . . X . 7 M . (DS) are provided with a reinforced metal insert in the cap.

Cable glands UN . . . X . 7 . (DS) and UN . . . X . 7 M . (DS) are provided with single (S1) or double (S1+S2) sealing rings.

Cable glands UN . . X . 4 - . DC are provided with double rings and internal crowns.

Cable glands UN . . X . 4 - . ; UN . . . X . 7 . and UN . . . X . 7 M . are provided with single (S1) sealing rings only.

Cable glands series UN . . X E 7 - . F (axb) are provided with sealing ring specific for non-circular (flat cables), sealing ring hole dimensions are specified in brackets.

Cable glands UN . . X . 4 - . ; UN . . X . 4 - . DC; UN . . . X . 7 . ; UN . . . X . 7 . (DS); UN . . . X . 7 M . ; UN . . . X . 7 M . (DS) can be supplied with tap, polyamide made, as accessory (PT.), suitable to guarantee IP degree when installed according to manufacturer's instructions. Details in Table 4.

Additionally, dust plugs are used for Ex polyamide cable glands to protect the glands from dust during the shipment. It is taken out during installation.

Details on sealing rings material, flat washer (placed between the body and the cover of enclosures) materials and limitations are listed in Table 1.

## Conditions of use

- The cable glands are only suitable for fixed installations. Cables shall be effectively clamped to prevent pulling or twisting.
- The cable glands/plugs and the relevant cables, shall be used where a protection against risk of mechanical damage is provided, when they are suitable for low mechanical risk (4J) only.
- The cable gland installation shall be done according to safety manufacturer instructions to maintain degree of protection.
- For gas installations (only for cable glands with M50/PG42/PF 1 ½"/NPT 1 ½" threads and following) and dust installations: Warning. Potential electrostatic charging hazard - See instructions. Clean only with antistatic clothes.
- When cable glands are installed with polyamide insert PT., mechanical risk have to be taken into account, depending on cable gland and insert tap. When insert tap is removed in order to install the proper cable, the integrity of sealing rings have to be checked, in order to guarantee the correct tightness. If necessary, sealing rings have to be replaced with new ones (original spare parts only).
- Cable glands for non circular cables shall be fitted with proper cables, suitable for sealing ring, according to manufacturer's instruction.

## Design options

Threads types: Metric ISO pitch 1,5 (ISO 965/1 and ISO 965/3)  
NPT ANSI ASME B1.20.1  
ISO 228/1  
PG DIN 40430

Annex to: IECEx IMQ 15.0009X issue No. 0

Applicant: CORTEM S.p.A.

Apparatus: UN . . X . 4 - . ; UN . . X . 4 - . DC; UN . . . X . 7 . ; UN . . X E 7 - . F (axb); UN . . . X . 7 . (DS); UN . . . X . 7 M . ; UN . . . X . 7 M . (DS); PLG . . X E 4 - . ; PLG . . . X E 7 - . ; PT .



Table 1: materials and service temperatures

Series	Service temperature <sup>1</sup>	Sealing rings material	Flat washer materials	OR materials	Mechanical risk
UN . . X . 4 - .	-40 ÷ +80 °C <sup>3</sup>	chloroprene (neoprene) silicone	chloroprene (neoprene) silicone KLINGERSIL® C-4400 EPDM rubber, NBR	chloroprene (neoprene) silicone EPDM rubber	Low (4J)
UN . . X . 4 - . DC	-40 ÷ +80 °C <sup>3</sup>	chloroprene (neoprene) silicone	chloroprene (neoprene) silicone KLINGERSIL® C-4400 EPDM rubber, NBR	chloroprene (neoprene) silicone EPDM rubber	Low (4J)
PLG . . X E 4 - .	-40 ÷ +80 °C	-	chloroprene (neoprene) silicone KLINGERSIL® C-4400 EPDM rubber, NBR	-	Low (4J)
UN . . . X . 7 .	-30 ÷ +70 °C	NBR	chloroprene (neoprene) silicone KLINGERSIL® C-4400 EPDM rubber, NBR	chloroprene (neoprene) silicone EPDM rubber	High (7J)
	-40 ÷ +70 °C	chloroprene (neoprene)			
	-60 ÷ +70 °C	silicone			
UN . . X E 7 - . F (axb)	-60 ÷ +70 °C	silicone	chloroprene (neoprene) silicone KLINGERSIL® C-4400 EPDM rubber, NBR	chloroprene (neoprene) silicone EPDM rubber	High (7J)
UN . . . X . 7 . (DS)	-30 ÷ +70 °C	NBR	chloroprene (neoprene) silicone KLINGERSIL® C-4400 EPDM rubber, NBR	chloroprene (neoprene) silicone EPDM rubber	High (7J) <sup>2</sup>
	-40 ÷ +70 °C	chloroprene (neoprene)			
	-60 ÷ +70 °C <sup>2</sup>	silicone			
UN . . . X . 7 M .	-30 ÷ +70 °C	NBR	chloroprene (neoprene) silicone KLINGERSIL® C-4400 EPDM rubber, NBR	chloroprene (neoprene) silicone EPDM rubber	High (7J) <sup>2</sup>
	-40 ÷ +70 °C	chloroprene (neoprene)			
	-60 ÷ +70 °C <sup>2</sup>	silicone			
UN . . . X . 7 M . (DS)	-30 ÷ +70 °C	NBR	chloroprene (neoprene) silicone KLINGERSIL® C-4400 EPDM rubber, NBR	chloroprene (neoprene) silicone EPDM rubber	High (7J) <sup>2</sup>
	-40 ÷ +70 °C	chloroprene (neoprene)			
	-60 ÷ +70 °C <sup>2</sup>	silicone			
PLG . . . X E 7 - .	-30 ÷ +70 °C	-	NBR	-	High (7J)
	-40 ÷ +70 °C		chloroprene (neoprene) EPDM rubber		
	-60 ÷ +70 °C		silicone		
	-60 ÷ +70 °C		KLINGERSIL® C-4400		

Notes

<sup>1</sup> Service temperature is related to material of sealing rings and polyamide which cable glands body is made of, but can be additionally limited by material of flat washer/OR material temperature limitations: chloroprene (-40÷100 °C); silicone (-60÷180 °C); EPDM rubber (-40÷110 °C); KLINGERSIL® C-4400 fiber (-50÷130 °C); NBR (-40÷100 °C). The use of these materials in flat washer/OR has to be taken into account in determination of lower limit of service temperature of cable glands, while upper limit is 80 °C for UN . . X . 4 - . ; UN . . X . 4 - . DC; PLG . . X E 4 - . and 70°C for all other models.

<sup>2</sup> Some models, according to Tables 3 have the reduced temperature range -40÷+70°C.

<sup>3</sup> When used blue caps and/or protection tap PT. is used, the service temperature is -40÷70 °C. Low mechanical risk (4J).

Annex to: IECEx IMQ 15.0009X issue No. 0

Applicant: CORTEM S.p.A.

Apparatus: UN . . X . 4 - . ; UN . . X . 4 - . DC; UN . . . X . 7 . ; UN . . X E 7 - . F (axb); UN . . . X . 7 . (DS); UN . . . X . 7 M . ; UN . . . X . 7 M . (DS); PLG . . X E 4 - . ; PLG . . . X E 7 - . ; PT .



Table 2: key code

Table 2: key code									
<b>4 Jules Impact cable glands</b>									
UN	(1)	(2)	X	(3)	4	-	(6)		
UN	(1)	(2)	X	(3)	4	-	(6)	DC	
<b>4 Jules Impact plugs</b>									
PLG	(2)	(1)	X	E	4	-	(6)		
<b>7 Jules Impact cable glands</b>									
UN	(1)	(2)	(7)	X	(3)	7	(5)	(6)	
UN	(1)	(2)	(7)	X	(3)	7	(5)	(6)	(DS)
<b>7 Jules Impact cable glands for FLAT cables</b>									
UN	(1)	(2)	X	E	7	-	(6)	F	(axb)
<b>7 Jules Impact plugs</b>									
PLG	(2)	(1)	(7)	X	E	7			-(6)
<b>Protection tap</b>									
PT	(8)								

(1) thread type: "N" – NPT ANSI ASME B1.20.1  
 "I" – Metric ISO pitch 1,5 (ISO 965/1, ISO 965/2 and ISO 965/3)  
 "P" – PG DIN 40430  
 "C" – PF ISO 228/1

(2) thread size according to Tables 3

(3) cap colour: "E" for black cap  
 "I" for blue cap

(4) impact joule "4" for 4J  
 "7" for 7J

(5) cap insert none: full plastic  
 "M" for metal reinforced cap

(6) body dimensional variant if present, according to Tables 3

(7) thread variant none: normal length  
 "L": long thread

(8) dimensions and size according to Tables 3

(DS) double sealing ring (S1; S1+S2)  
 DC double crowns (sealing rings)

(axb): dimensions in mm of sealing ring, according to Tables 3

F Cable glands for flat seals

Annex to: IECEx IMQ 15.0009X issue No. 0

Applicant: CORTEM S.p.A.

Apparatus: UN . . X . 4 - . ; UN . . X . 4 - . DC; UN . . . X . 7 . ; UN . . X E 7 - . F (axb); UN . . . X . 7 . (DS); UN . . . X . 7 M . ; UN . . . X . 7 M . (DS); PLG . . X E 4 - . ; PLG . . . X E 7 - . ; PT .



Cable glands/plugs sizes

Table 3.1: UN . . X . 4 - . ; UN . . X . 4 - . DC				
Model	Thread	Min-max cable [mm]	Torque value [Nm]	Mechanical risk
UN I 1 X.4-SX2	M20x1.5	5,0-10,0	2,5	Low (4J)
UN I 1 X.4-X2	M20x1.5	6,0-12,0	5,0	
UN I 1 X.4-X2L	M20x1.5	6,0-12,0	5,0	
UN I 1 X.4-X3	M20x1.5	10,0-14,0	5,5	
UN I 1 X.4-X4	M20x1.5	10,0-14,0	5,5	
UN I 2 X.4-SX5	M25x1.5	10,0-14,0	5,5	
UN I 2 X.4-X5	M25x1.5	13,0-18,0	7,0	
UN I 2 X.4-SX6	M25x1.5	10,0-14,0	5,5	
UN I 2 X.4-X6	M25x1.5	13,0-18,0	7,0	
UN I 2 X.4-XEU25	M25x1.5	11,0-17,0	5,0	
UN I 3 X.4-XEU32	M32x1.5	15,0-21,0	6,0	
UN I 3 X.4-SX7	M32x1.5	13,0-18,0	7,0	
UN I 3 X.4-X7	M32x1.5	18,0-25,0	9,0	
UN I 4 X.4-XEU40	M40x1.5	19,0-28,0	5,0	
UN I 4 X.4-XEU40L	M40x1.5	19,0-28,0	5,0	
UN I 4 X.4-X8	M40x1.5	22,0-32,0	17,0	
UN I 5 X.4-X9	M50x1.5	30,0-38,0	22,0	
UN I 6 X.4-X10	M63x1.5	34,0-44,0	23,0	
UN N 1 X.4-SX2	NPT 1/2"	5,0-10,0	2,5	
UN N 1 X.4-X2	NPT 1/2"	6,0-12,0	5,0	
UN N 1 X.4-LX2	NPT 1/2"	10,0-14,0	5,5	
UN N 2 X.4-X3	NPT 3/4"	13,0-18,0	7,0	
UN N 3 X.4-X4	NPT 1"	18,0-25,0	9,0	
UN N 4 X.4-X8	NPT 1 1/4"	22,0-32,0	17,0	
UN N 5 X.4-X9	NPT 1 1/2"	30,0-38,0	22,0	
UN N 6 X.4-X10	NPT 2"	34,0-44,0	23,0	
UN C 1 X.4-SX2	PF 1/2"	5,0-10,0	2,5	Low (4J)
UN C 1 X.4-X2	PF 1/2"	6,0-12,0	5,0	
UN C 1 X.4-LX2	PF 1/2"	10,0-14,0	5,5	
UN C 2 X.4-X3	PF 3/4"	13,0-18,0	7,0	
UN C 3 X.4-X4	PF 1"	18,0-25,0	9,0	
UN P 4 X.4-X4	PG 13,5	6,0-12,0	5,0	Low (4J)
UN P 5 X.4-X5	PG 16	10,0-14,0	5,5	
UN P 6 X.4-X6	PG 21	13,0-18,0	7,0	
UN P 7 X.4-X7	PG 29	18,0-25,0	9,0	
UN P 8 X.4-X8	PG 36	22,0-32,0	17,0	
UN P 9 X.4-X9	PG 42	30,0-38,0	22,0	
UN P 10 X.4-X10	PG 48	34,0-44,0	23,0	
UN I 2 X.4-X3 DC	M25x1.5	9-12; 12,0-18,0	8,0	

Table 3.2: PLG . . X E 4 - .					
Model	Model	Model	Model	Torque value [Nm]	Mechanical risk
PLG 02 I X E 4-X02	PLG 02 N X E 4-X02	PLG 02 C X E 4-X02	PLG 02 P X E 4-X02	1.5	Low (4J)
PLG 01 I X E 4-X01	PLG 01 N X E 4-X01	PLG 01 C X E 4-X01	PLG 01 P X E 4-X01	1.5	
PLG 1 I X E 4-X1	PLG 1 N X E 4-X1	PLG 1 C X E 4-X1	PLG 1 P X E 4-X1	2	
PLG 2 I X E 4-X2	PLG 2 N X E 4-X2	PLG 2 C X E 4-X2	PLG 2 P X E 4-X2	2.5	
PLG 3 I X E 4-X3	PLG 3 N X E 4-X3	PLG 3 C X E 4-X3	PLG 3 P X E 4-X3	4	
PLG 4 I X E 4-X4	PLG 4 N X E 4-X4	PLG 4 C X E 4-X4	PLG 4 P X E 4-X4	6	
PLG 5 I X E 4-X5	PLG 5 N X E 4-X5	PLG 5 C X E 4-X5	PLG 5 P X E 4-X5	8	
PLG 6 I X E 4-X6	PLG 6 N X E 4-X6	PLG 6 C X E 4-X6	PLG 6 P X E 4-X6	10	

Annex to: IECEx IMQ 15.0009X issue No. 0

Applicant: CORTEM S.p.A.

Apparatus: UN . . X . 4 - . ; UN . . X . 4 - . DC; UN . . . X . 7 . ; UN . . X E 7 - . F (axb); UN . . . X . 7 . (DS); UN . . . X . 7 M . ; UN . . . X . 7 M . (DS); PLG . . X E 4 - . ; PLG . . . X E 7 - . ; PT .



* Table 3.3: UN . . . X . 7 .			
Model	Min-max cable [mm]	Torque value [Nm]	Mechanical risk
UN I 02 X . 7	4-6.5	2	High (7J)
UN I 02 L X . 7	4-6.5	2	
UN I 01 X . 7 -SX1	5-8	4	
UN . 01 X . 7 -SX1L	5-8	4	
UN I 01 X . 7	6-10	4	
UN I 01 L X . 7	6-10	4	
UN I 1 X . 7 -SX2	6-10	2.5	
UN I 1 X . 7	7-12	5	
UN I 1 L X . 7	7-12	5	
UN I 1 X . 7 -MX2	7-13	4.5	
UN I 1 X . 7 -X3	11-14	5.5	
UN I 1 X . 7 -X4	11-14	5.5	
UN I 2 X . 7 -SX5	11-14	5.5	
UN I 2 X . 7 -SX6	11-14	5.5	
UN I 2 X . 7 S	12-17	5	
UN I 2 L X . 7 S	12-17	5	
UN I 2 X . 7	14-18	8	
UN I 2 L X . 7	14-18	8	
UN I 3 X . 7 -SX7	14-18	8	
UN I 3 X . 7 S	16-21	6	
UN I 3 L X . 7 S	16-21	6	
UN I 3 X . 7	19-25	9	
UN I 4 X . 7 -XEU40	20-28	5	
UN I 4 X . 7 S	20-28	5	
UN I 4 X . 7	23-32	17.5	
UN I 5 X . 7	31-38	22	
UN I 6 X . 7	35-44	24	

* Table 3.4: UN . . X E 7 - . F (axb)					
Cable gland code	Sealing ring dimensions (axb) [mm x mm]	Cable min [mm x mm]	Cable max [mm x mm]	Torque value [Nm]	Mechanical risk
UN I 2 X E 7-SX5 F (axb)	6,0x10,8	4,21x11,69	5,23 x 13,21	8	High (7J)
	5,0x12,8	5,03 x 12,50	6,05 x 14,02		
UN I 2 X E 7-X5 F (axb)	6,0x10,8	4,21x11,69	5,23 x 13,21		
	5,0x12,8	5,03 x 12,50	6,05 x 14,02		
UN I 2 X E 7-X25 F (axb)	5,0x15,0	6,09 x 13,72	7,11 x 15,24		
	6,0x10,8	4,21x11,69	5,23 x 13,21		
UN I 2 X E 7-X25 F (axb)	5,0x12,8	5,03 x 12,50	6,05 x 14,02		
	5,0x15,0	6,09 x 13,72	7,11 x 15,24		
UN I 2 X E 7-SX6 F (axb)	6,0x10,8	4,21x11,69	5,23 x 13,21		
	5,0x12,8	5,03 x 12,50	6,05 x 14,02		
UN I 2 X E 7-X6 F (axb)	6,0x10,8	4,21x11,69	5,23 x 13,21		
	5,0x12,8	5,03 x 12,50	6,05 x 14,02		
UN I 2 X E 7-X6 F (axb)	5,0x15,0	6,09 x 13,72	7,11 x 15,24		
	6,0x10,8	4,21x11,69	5,23 x 13,21		
UN I 2 X E 7-X25L F (axb)	5,0x12,8	5,03 x 12,50	6,05 x 14,02		
	5,0x15,0	6,09 x 13,72	7,11 x 15,24		

\* metric threads cable glands sizes are shown; models with other threads, as detailed in table 2, are available. Full list is shown in drawings CA3-15-IEC.15 rev. 0 and CA3-15-IEC.16 rev. 0.



* Table 3.5: UN . . . X . 7 . (DS)					
Model	Min-max cable [mm]		Torque value [Nm]		Mechanical risk
	S1+S2	S1	S1+S2	S1	
UN I 02 X . 7 (DS)	3-4	4-6.5	1	2	High (7J)
UN I 02 LX . 7 (DS)	3-4	4-6.5	1	2	
UN I 01 X . 7 -SX1 (DS)	4-5	5-8	3.5	4	High (7J) Models with silicone sealing rings and black caps have the reduced temperature range -40÷+70°C Models with silicone sealing rings and blue caps have the temperature range -60÷+70°C
UN . 01 X . 7 -SX1L (DS)	4-5	5-8	3.5	4	
UN I 01 X . 7 (DS)	4-7	6-10	3.5	4	
UN I 01 LX . 7 (DS)	4-7	6-10	3.5	4	
UN I 1 X . 7 -SX2 (DS)	4-7	6-10	3.2	2.5	
UN I 1 X . 7 (DS)	6-8.5	7-12	5	5	
UN I 1 LX . 7 (DS)	6-8.5	7-12	5	5	
UN I 1 X . 7 -MX2 (DS)	4-7	7-13	3.5	4.5	
UN I 1 X . 7 -X3 (DS)	8-12	11-14	5.5	5.5	
UN I 1 X . 7 -X4 (DS)	8-12	11-14	5.5	5.5	
UN I 2 X . 7 -SX5 (DS)	8-12	11-14	5.5	5.5	
UN I 2 X . 7 -SX6 (DS)	8-12	11-14	5.5	5.5	
UN I 2 X . 7 S (DS)	9-13	12-17	5	5	
UN I 2 LX . 7 S (DS)	9-13	12-17	5	5	
UN I 2 X . 7 (DS)	10-14	14-18	5.5	8	High (7J)
UN I 2 LX . 7 (DS)	10-14	14-18	5.5	8	
UN I 3 X . 7 -SX7 (DS)	10-14	14-18	5.5	8	
UN I 3 X . 7 S (DS)	12-16	16-21	4.5	6	
UN I 3 LX . 7 S (DS)	12-16	16-21	4.5	6	
UN I 3 X . 7 (DS)	14-20	19-25	8	9	
UN I 4 X . 7 -XEU40 (DS)	17-21	20-28	5	5	
UN I 4 X . 7 S (DS)	17-21	20-28	5	5	
UN I 4 X . 7 (DS)	21-26	23-32	15	17.5	
UN I 5 X . 7 (DS)	22-31	31-38	18	22	
UN I 6 X . 7 (DS)	28-35	35-44	22	24	

* Table 3.6: UN . . . X . 7 M .			
Model	Min-max cable [mm]	Torque value [Nm]	Mechanical risk
UN I 02 X . 7 M -0XS	4-6.5	2	High (7J)
UN I 02 X . 7 M -XS	4-6.5	2	
UN I 01 X . 7 M -SX1	5-8	2.5	High (7J) Models with silicone sealing rings have the reduced temperature range -40÷+70°C
UN I 01 X . 7 M -SX1L	5-8	2.5	
UN I 01 X . 7 M -X1	6-10	2.5	
UN I 01 X . 7 M X1L	6-10	2.5	
UN I 1 X . 7 M -SX2	6-10	2.5	
UN I 1 X . 7 M -X2	7-12	5	
UN I 1 X . 7 M -X2L	7-12	5	
UN I 1 X . 7 M -MX2	7-13	4.5	
UN I 1 X . 7 M -X3	11-14	5.5	
UN I 1 X . 7 M -X4	11-14	5.5	
UN I 2 X . 7 M -SX5	11-14	5.5	
UN I 2 X . 7 M -SX6	11-14	5.5	
UN I 2 X . 7 M -XEU25	12-17	5	
UN I 2 X . 7 M -XEU25L	12-17	5	
UN I 2 X . 7 M -X5	14-18	8	High (7J)
UN I 2 X . 7 M -X6	14-18	8	
UN I 3 X . 7 -SX7	14-18	8	
UN I 3 X . 7 M -XEU32	16-21	6	
UN I 3 X . 7 M -XEU32L	16-21	6	
UN I 3 X . 7 M -X7	19-25	9	
UN I 4 X . 7 M -XEU40	20-28	5	
UN I 4 X . 7 M -XEU40L	20-28	5	
UN I 4 X . 7 M -X8	23-32	17.5	
UN I 5 X . 7 M -X9	31-38	22	
UN I 6 X . 7 M -X10	35-44	23	

\* metric threads cable glands sizes are shown; models with other threads, as detailed in table 2, are available. Full list is shown in drawings CA3-15-IEC.15 rev. 0 and CA3-15-IEC.16 rev. 0.

Annex to: IECEx IMQ 15.0009X issue No. 0

Applicant: CORTEM S.p.A.

Apparatus: UN . . X . 4 - . ; UN . . X . 4 - . DC; UN . . . X . 7 . ; UN . . X E 7 - . F (axb); UN . . . X . 7 . (DS); UN . . . X . 7 M . ; UN . . . X . 7 M . (DS); PLG . . X E 4 - . ; PLG . . . X E 7 - . ; PT .



* Table 3.7: UN . . . X . 7 M . (DS)					
Model	Min-max cable [mm]		Torque value [Nm]		Mechanical risk
	S1+S2	S1	S1+S2	S1	
UN I 02 X . 7 M -0XS (DS)	3-4	4-6.5	1.5	2	High (7J) Models with silicone sealing rings have the reduced temperature range -40÷+70°C
UN I 02 X . 7 M -XS (DS)	3-4	4-6.5	1.5	2	
UN I 01 X . 7 M -SX1 (DS)	4-5	5-8	2	2.5	
UN I 01 X . 7 M -SX1L (DS)	4-5	5-8	2	2.5	
UN I 01 X . 7 M -X1 (DS)	4-7	6-10	3.2	2.5	
UN I 01 X . 7 M X1L (DS)	4-7	6-10	3.2	2.5	
UN I 1 X . 7 M -SX2 (DS)	4-7	6-10	3.2	2.5	
UN I 1 X . 7 M -X2 (DS)	6-8.5	7-12	5	5	
UN I 1 X . 7 M -X2L (DS)	6-8.5	7-12	5	5	
UN I 1 X . 7 M -MX2 (DS)	4-7	7-13	3.5	4.5	
UN I 1 X . 7 M -X3 (DS)	8-12	11-14	5.5	5.5	
UN I 1 X . 7 M -X4 (DS)	8-12	11-14	5.5	5.5	
UN I 2 X . 7 M -SX5 (DS)	8-12	11-14	5.5	5.5	
UN I 2 X . 7 M -SX6 (DS)	8-12	11-14	5.5	5.5	
UN I 2 X . 7 M -XEU25 (DS)	9-13	12-17	5	5	
UN I 2 X . 7 M -XEU25L (DS)	9-13	12-17	5	5	
UN I 2 X . 7 M -X5 (DS)	10-14	14-18	5.5	8	
UN I 2 X . 7 M -X6 (DS)	10-14	14-18	5.5	8	
UN I 3 X . 7 -SX7 (DS)	10-14	14-18	5.5	8	
UN I 3 X . 7 M -XEU32 (DS)	12-16	16-21	4.5	6	
UN I 3 X . 7 M -XEU32L (DS)	12-16	16-21	4.5	6	
UN I 3 X . 7 M -X7 (DS)	14-20	19-25	8	9	
UN I 4 X . 7 M -XEU40 (DS)	17-21	20-28	5	5	
UN I 4 X . 7 M -XEU40L (DS)	17-21	20-28	5	5	
UN I 4 X . 7 M -X8 (DS)	21-26	23-32	15	17.5	
UN I 5 X . 7 M -X9 (DS)	22-31	31-38	18	22	
UN I 6 X . 7 M -X10 (DS)	28-35	35-44	23	23	

\* metric threads cable glands sizes are shown; models with other threads, as detailed in table 2, are available. Full list is shown in drawings CA3-15-IEC.15 rev. 0 and CA3-15-IEC.16 rev. 0.

Table 3.8: PLG . . . X E 7 - .					
Model	Model	Model	Model	Torque value [Nm]	Mechanical risk
PLG 02 I X E 7	PLG 02 N X E 7 -X02	PLG 02 C X E 7 -X02	PLG 1 P X E 7	1.5	High (7J)
PLG 01 I X E 7	PLG 01 N X E 7 -X01	PLG 01 C X E 7 -X01	PLG 2 P X E 7	1.5	
PLG 01 I X E 7 -X01L	PLG 01 N X E 7 -X01L	PLG 01 C X E 7 -X01L	PLG 2 P X E 7 -X2L	1.5	
PLG 01 I L X E 7	PLG 01 N X E 7 -X01HL	PLG 01 C X E 7 -X01HL	PLG 2 P L X E 7	1.5	
-	-	-	PLG 3 P X E 7	1.5	
PLG 1 I X E 7	PLG 1 N X E 7 -X1	PLG 1 C X E 7 -X1	PLG 4 P X E 7	2	
PLG 1 I X E 7 -X1L	PLG 1 N X E 7 -X1L	PLG 1 C X E 7 -X1L	PLG 4 P X E 7 -X4L	2	
PLG 1 I L X E 7	PLG 1 N X E 7 -X1HL	PLG 1 C X E 7 -X1HL	PLG 4 P L X E 7	2	
-	-	-	PLG 5 P X E 7	2	
PLG 2 I X E 7	PLG 2 N X E 7 -X2	PLG 2 C X E 7 -X2	PLG 6 P X E 7	2.5	
PLG 2 I L X E 7	PLG 2 N X E 7 -X2HL	PLG 2 C X E 7 -X2HL	PLG 6 P L X E 7	2.5	
PLG 3 I X E 7	PLG 3 N X E 7 -X3	PLG 3 C X E 7 -X3	PLG 7 P X E 7	4	
PLG 4 I X E 7	PLG 4 N X E 7 -X4	PLG 4 C X E 7 -X4	PLG 8 P X E 7	6	
PLG 5 I X E 7	PLG 5 N X E 7 -X5	PLG 5 C X E 7 -X5	PLG 9 P X E 7	8	
PLG 6 I X E 7	PLG 6 N X E 7 -X6	PLG 6 C X E 7 -X6	PLG 10 P X E 7	10	

Table 4: PT .				
From size ...	... to size	Material	Mechanical risk	Sealing ring
M12/PG7/PF 1/4" NPT1/4"	M63/PG48/PF 2" NPT 2"	polyamide	High (7J) at T≥-40°C Low (4J) at T<-40°C	single
M12/PG7/PF 1/4" NPT1/4"	M32/PG21/PF 1" NPT 1"		High (7J)	double

**Annex to:** IECEx IMQ 15.0009X issue No. 0

**Applicant:** CORTEM S.p.A.

**Apparatus:** UN . . X . 4 - . ; UN . . X . 4 - . DC; UN . . . X . 7 . ; UN . . X E 7 - . F (axb); UN . . . X . 7 . (DS); UN . . . X . 7 M . ; UN . . . X . 7 M . (DS); PLG . . X E 4 - . ; PLG . . . X E 7 - . ; PT .



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**Remarks**

All tests on UN . . . X . 7 . ; UN . . X E 7 - . F (axb); UN . . . X . 7 . (DS); UN . . . X . 7 M . ; UN . . . X . 7 M . (DS); PLG . . . X E 7 - . have been performed taking into account an upper service temperature of +80 °C. Service temperature has been then assumed to +70 °C, due to RTI/TI declared (90°C) for material.